

I CLAIM:

1. A structure of a multi-directional, combination-type ratchet wheel wrench with sleeve, comprising:
an elongated handle having a hexagonal opening each at the end thereof, wherein a ratchet wheel is mounted within the hexagonal opening and is controlled to move clockwise and counterclockwise and a single corner wall of the hexagonal opening is slightly retracted and the top and bottom ends of the corner end face are slightly recessed, and a slot is formed between two recesses;
a convex-shaped spring engaged onto the corner wall with a top and a bottom bent section of the spring being engaged with the slot, forming a center slightly protruded section of the spring urging the corner wall; and
a sleeve with through opening at both ends thereof and of hexagonal opening of different size, and having a step-like structure, the structure being adaptable to the hexagonal openings at the end of the elongated handle; thereby
the ratchet wheel wrench with sleeves of different sizes combined at the end of the hexagonal openings of the wrench is used to tighten or loosen nuts with same sizes as that of the hexagonal opening of

the sleeve.

2. The structure of a multi-directional, combination-type ratchet wheel wrench with sleeve of claim 1, wherein the opening at the ends of the elongated handle is a dodecagon shape.
- 5 3. A structure of a multi-directional, combination-type ratchet wheel wrench with sleeve of claim 1, wherein the opening of the sleeve is dodecagon shape.
- 10 4. A structure of a multi-directional, combination-type ratchet wheel wrench with sleeve of claim 1, wherein a single corner wall or the corner wall of corresponding sides or the corner wall of the equilateral side within the hexagonal opening of the elongated handle is slightly retractable and the top and bottom ends of the end face of the corner wall are slightly recessed, and a slot is formed between two recesses, and each of the corner wall or the corner wall of corresponding sides or corner wall of the equilateral side is provided with a convex-shaped spring for the positioning of a single face or the corresponding sides or the equilateral sides of the hexagonal shaped sleeve.
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- 20 5. A structure of a multi-directional, combination-type ratchet wheel wrench with sleeve of claim 1, wherein a recessed groove is

provided to the middle section of the sleeve shaft, and a rubber rim is mounted within the recessed groove as a structure for engagement.

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